

## Catalogue of American Amphibians and Reptiles.

Thomas, R. and R. Powell. 1992. *Typhlops bectus*.

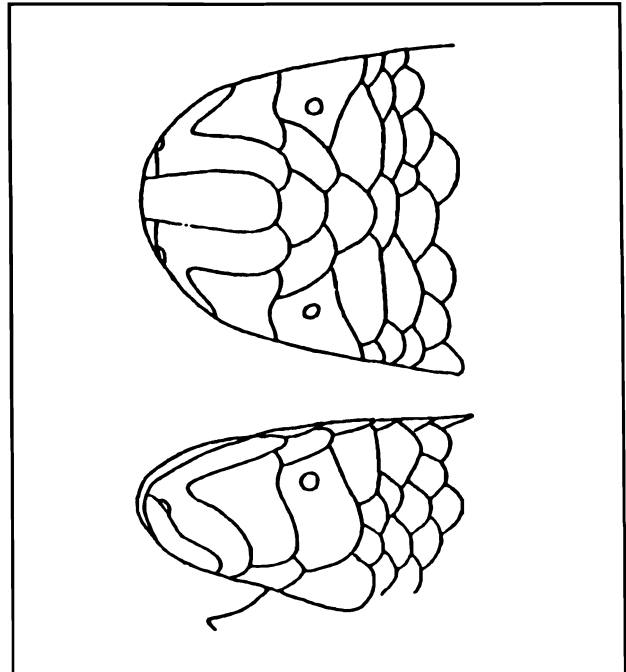
***Typhlops bectus* Thomas**

*Typhlops lumbricalus*: Richmond, 1964:7 (part) (not of Linnaeus, 1758).

*Typhlops bectus* Thomas, 1974:12. Type-locality, "Martineau, ca. 9 km (airline) W Jérémie, Dépt. du Sud [correctly Dépt. de la Grande Anse], Haiti." Type-specimen, Museum of Comparative Zoology (MCZ) 81149 (original number, Albert Schwartz Field Series, ASFS V9145), an adult (sex unknown) collected by Richard Thomas on 12 March 1966 (examined by RT).

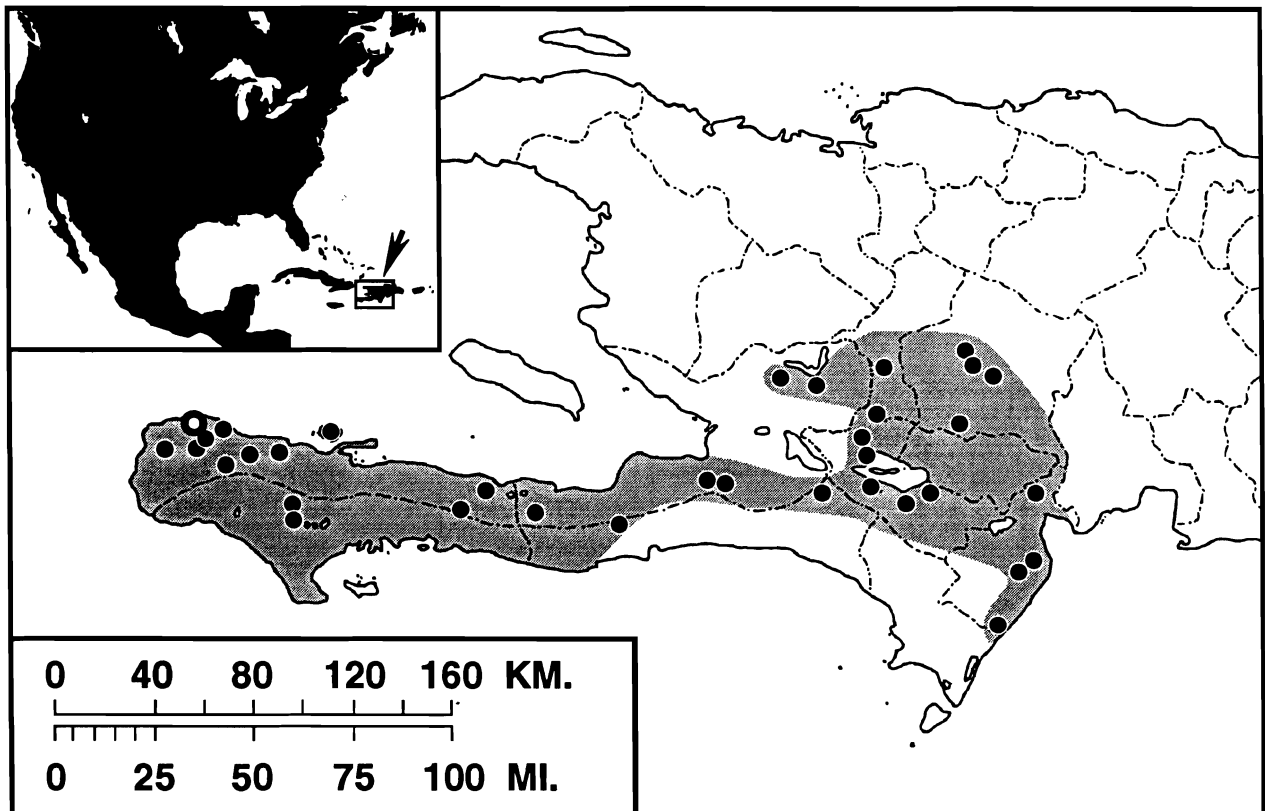
• **Content.** No subspecies are recognized (but see Remarks).

• **Definition.** *Typhlops bectus* is a blind snake characterized by (see Thomas, 1976 and 1989, for complete explanations of characters): (1) head tapered; (2) rostral narrow in dorsal aspect (rostral width/rostral length 0.44-0.57), clavate (mode) to parallel, not flared on apex, labial flare slight (category 1); (3) preocular angle 40-60°, apex angled to rounded, lower portion contacting only the 3rd upper labial; (4) ocular length ~ 2/3 height, sinuosity of anterior edge (minimum preocular length/maximum preocular length) 0.23-0.10; (5) rostronasal complex calyculate to parallel; (6) postoculars 2 (cycloid), aberrantly 1 or 3; (7) 1st parietal standard, spanning 2 scale rows - occasionally narrower, spanning slightly more than 1 scale row; (8) 2nd parietal present and equal in size to 1st or absent; (9) maximum total length (TL) to 237 mm; (10) TL/tail length in males 23-30, females 28-43; (11) TL/midbody diameter 26-37; (12) middorsal scales 284-324; (13) scale rows 20-20 or 20-18, with reduction in some populations occurring far posteriorly (69-93% TL), far posterior reduction often incomplete with only initial step of major reduction (20-19 rows); reduction in other populations at about midbody or beyond (48-78% TL); (14) coloration bicolor with dorsal pigmentation (pale tan to dark brown) fading over a narrow midlateral zone to an unpigmented venter, collar sometimes present; (15) rectal caecum



**Figure.** Head of *Typhlops bectus*, ASFS V9604, currently at the University of Kansas Museum of Natural History, KU number pending (from Thomas, 1974).

present; (16) no everted hemipenes available, *in situ* organs moderate in size, probably expanded; males few (6 of 84 specimens); (17) cranium tapered, width across prefrontals 84-85% of width across prootics; (18) premaxilla narrow (~ 35% of width across prefrontals), concave anteriorly, not protuberant; posteroventral edges transverse, forming right angle juncture with median, caudad blade; blade



**Map.** Distribution of *Typhlops bectus* (modified from Schwartz and Henderson, 1991). The large open circle marks the type-locality, solid circles indicate other records. This species is not known from regions within the shaded area with elevations > 800 m.

narrow; (19) nasals without lateral angle, narrowly bordering narial opening or excluded from it by prefrontals contacting premaxilla; (20) septomaxilla without sliver, anterior portion broad; (21) frontal-parietal suture transverse, slightly sinuous; (22) frontal with blade-like anterior ventral process, process fused distally; (23) optic foramen canalicular; (24) postorbital process of parietal moderate; (25) parietal without temporal ridges; (26) lappet of prootic vestigial, nearly absent, tongue not contacting parietal; or lappet moderately developed and slender, overlapping tongue and tongue in broad contact with parietal; (27) supraoccipitals separate, in moderate median contact; (28) exoccipitals not fused with prootics; (29) angular not sliverlike; (30) dorsal process of quadrate hooked anteriorly; (31) atlantal hypapophysis tablike with keel, total hypapophyses 5; (32) hyoid U-shaped with ceratobranchials fused to one another anteriorly, no basihyal; (33) pelvis of small rodlike ischia or absent.

• **Diagnosis.** The combination of 280-320 ( $\bar{x}$  > 300) middorsal scales and 20 scale rows anteriorly distinguish *Typhlops bectus* from Antillean congeners. Other diagnostic, but not unique, external characters include a narrow, clavate rostral; calyculate rostronasal complex; sharply angled preocular; and scale rows reducing to 18 beyond midbody (western populations), or reducing to only 19 far posteriorly, or not reducing.

• **Descriptions.** In addition to the original of Thomas (1974), Thomas (1976) and Schwartz and Henderson (1991) provided descriptions of the species.

• **Illustrations.** Thomas (1974, 1976) provided line drawings of the head. Thomas (1965) figured a flattened rostral in this species (as *T. lumbricalis*).

• **Distribution and Biology.** The species is known from southwestern Hispaniola, including the Tiburon Peninsula and the physiographically continuous Sierra de Baoruco, but excluding the lowlands of the Barahona Peninsula. The range also includes the Valle de Neiba and north onto the southern North Island of Hispaniola, and on the Île Grand Cayemite. Altitudinal distribution is from sea level to ca. 800 m. The range has been illustrated in Thomas (1974, 1976) and Schwartz and Henderson (1991). SEA/DVS (1990) provided an index of habitats in the Dominican Republic.

Thomas (1976) appropriately characterized *T. bectus* as eurytopic. Situations in which the species is found are predominantly mesic, but occasionally semixer, particularly in coastal areas. Specimens from the xeric Valle de Neiba are from oasis-like localities. *Typhlops bectus* is usually found in areas with tree cover, but not necessarily deep shade, occasionally in open areas. As usual with members of this genus, snakes are found beneath rocks, logs, and other surface debris (Schwartz and Henderson, 1991).

• **Fossil Record.** None.

• **Pertinent Literature.** In addition to the original description of Thomas (1974) and the systematic treatise of Thomas (1976), the species is included in checklists and guides by Schwartz and Thomas (1975), Schwartz et al. (1978), Henderson and Schwartz (1984), Henderson et al. (1984), Schwartz and Henderson (1985, 1988), and Hedges and Thomas (1989). Schwartz (1980) placed the species among South Island invaders of the North Island. Thomas (1989) discussed phylogenetic relationships among Antillean congeners. Schwartz and Henderson (1991) summarized the literature on natural history.

• **Remarks.** A high proportion (~ 90%) of Tiburon Peninsula *T. bectus* are females, leading to the supposition that parthenogenesis may be common (Thomas, 1976). The eastern and northern

populations differ in a number of features from the southern and western populations (Thomas, 1974, 1976); more than one species is probably involved.

• **Etymology.** The name *bectus* is from the Greek *bectos* (the sixth), since *T. bectus* was the sixth species known from Hispaniola, and is treated as a noun in apposition to the generic name.

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